

I. AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Currently Amended) The slurry of claim 14, wherein the ~~chelating~~ particle comprises a metal oxide abrasive, iron oxide, a doped metal oxide, a metal nitride particle, a metal oxynitride particle, a metallic particle, a metal alloy particle, an organometallic particle, a polymer particle, a buckeyball, a buckeybowl, a carbon nanotube, a carbon black particle, activated carbon, a charcoal particle, a diamond particle, montmorillonite, an inorganically- and/or organically- modified clay, or a combination thereof.

3. (Currently Amended) The slurry of claim 14, wherein the particles to which spacers with chelator compounds are attached have a net negative zeta potential before attachment.

4. (Previously Presented) The slurry of claim 3, wherein the net negative zeta potential remains negative even after attachment of the plurality of chelator compounds.

5. (Currently Amended) The slurry of claim 14, wherein the chelating particles to which spacers with chelator compounds are attached have ~~[[has]]~~ an average particle size from about 1 nm to about 4000 nm.

6. (Currently Amended) The slurry of claim 14, wherein the plurality of chelator compounds attached to the ~~chelating~~ particle possess functional groups ~~comprising~~ selected from the group consisting of hydroxyls, carboxylic acids, amines, amides, imines, imides, mercaptans, sulfonic acids, hydroxamic acids, carbonyl groups, esters, ethers, ureas, cyano groups, nitro groups, ~~phosphonic acids, phosphonates~~, carbonates, inorganic salts thereof, or a combination thereof, and wherein at least a portion of the functional groups are no further than about 7Å from another functional group.

7. (Currently Amended) The slurry of claim 14, wherein each chelator compound, before being attached to the ~~chelating~~ particle, possesses at least three functional groups ~~comprising~~ selected from the group consisting of hydroxyls, carboxylic acids, amines, amides, imines, imides, mercaptans, sulfonic acids, hydroxamic acids, carbonyl groups, esters, ethers, ureas, cyano groups, nitro groups, ~~phosphonic acids, phosphonates,~~ carbonates, inorganic salts thereof, or a combinations thereof.

8. (Currently Amended) The slurry of claim 14, wherein the plurality of chelator compounds are selected from the group consisting of ~~comprises one or more of the following oligomeric and/or (co)polymeric chelators:~~ poly(styrene sulfonic acid), poly(vinyl sulfonic acid), poly(acrylic acid), poly(methacrylic acid), a poly(acrylate), a poly(methacrylate), a poly(alkacrylate), poly(maleic acid), poly(vinyl acetate), poly(vinyl alcohol), poly(acrylamide), poly(cyanoacrylate), a cellulosic material, or a mixture or copolymer thereof.

9. (Canceled)

10. (Canceled)

11. (Currently Amended) The slurry of claim ~~[[10]]~~ 14, wherein said spacer comprises at least about 10 carbon atom linkages.

12. (Currently Amended) The slurry of claim 11, wherein the spacer is oligomeric or (co)polymeric and ~~comprises~~ is selected from the group consisting of a polysiloxane; a polyolefin; a polyacrylate; a polyalkacrylate; a polycarbonate; a perfluorinated polymer; a halogenated polymer; a polyimide; a polyimine; a conjugated (co)polymer; a polyketone; a polyether; a polyurethane; a polylactide; or a copolymer or combination thereof.

13. (Canceled)

14. (Currently Amended) A polishing, etching, and/or residue removing slurry comprising:

- a polishing accelerator;
- a diluent;
- optionally an abrasive material; and

a plurality of ~~chelating~~ particles that are insoluble in the diluent, ~~said chelating particles comprising a particle and~~ wherein on the surfaces of a portion of said particles, a plurality of chelator compounds are attached through spacers that are different from the particles and the chelator compounds, wherein the spacers are covalently bound to the surfaces of said particles; and wherein said chelator compounds do not include phosphorus-containing functional groups. ~~wherein the chelator compounds are attached to a spacer, said spacer being different than the chelating compounds and different than the chelator particle, and said spacer being disposed between the chelating particle and the chelating compounds.~~

15. (Currently Amended) A chemical mechanical polishing slurry comprising:

- an oxidizer;
- a diluent;
- optionally an abrasive material; and

a plurality of ~~chelating~~ particles that are insoluble in water wherein on the surfaces of a portion of said particles, a plurality of chelator compounds are attached through spacers that are different from the particles and the chelator compounds, wherein the spacers are covalently bound to the surfaces of said particles; and wherein the chelator compounds contain and comprise: a particle body and a plurality of chelator molecules having a plurality of pendant functional groups selected from the group consisting of attached thereto, said functional groups comprising hydroxyls, carboxylic acids, amines, amides, imines, imides, mercaptans, sulfonic acids, hydroxamic acids, carbonyl groups, esters, ethers, ureas, cyano groups, nitro groups, phosphonic acids, phosphonates, carbonates, inorganic salts thereof, or a combination thereof, wherein at least a portion of the functional groups are no further than about 7Å from another functional group, and

~~wherein at least a portion of the chelator molecules having a plurality of pendant functional groups attached thereto are attached to a spacer, said spacer being attached to the particle body, said spacer being different than the chelator molecules and different than the particle body, and said chelator molecules being attached to the spacer, and~~

~~wherein at least a portion of the pendant functional groups are present at the surface of the particle when the particle is present in a solution containing water.~~

16-21. (Canceled)

22. (Previously Presented) The slurry of claim 15, wherein the functional groups on the chelators attached to the particle comprise at least three sulfonic acid groups, ~~and the spacer is attached to the particle by a covalent chemical bond.~~

23. (Cancelled)

24. (Cancelled)

25. (Currently Amended) The slurry of claim ~~[[24]]~~ 14, wherein the ~~chelating~~ particles to which spacers with chelator compounds are attached have an average particle size between about 10 nanometers to about 450 nanometers.

26. (Previously Presented) The slurry of claim 25, wherein the chelator compound comprises at least one of ethylenediaminetetraacetic acid, ethylenediamine, oxalic acid, lactic acid, citric acid, and gallic acid.

27. (Previously Presented) The slurry of claim 25, wherein the slurry further comprises a plurality of abrasive particles.

28. (Currently Amended) The slurry of claim 27, wherein the ~~plurality of chelating particles have an average size and the plurality of abrasive particles have an average size,~~ wherein the average size of the chelator particles to which spacers with chelator

compounds are attached is from about 50% to about 200% of the average size of the abrasive particles.